

PAGE: 1

Nguyen, D

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/799,910

DATE: 11/26/97
TIME: 13:57:20

INPUT SET: S21738.raw

This Raw Listing contains the General
Information Section and up to the first 5 pages.

#39
06-11-98

ENTERED

1
2
3 (1) General Information
4
5 (i) APPLICANT: Falb, Dean
6
7 (ii) TITLE OF THE INVENTION: COMPOSITIONS AND METHODS FOR
8 THE TREATMENT AND DIAGNOSIS OF
9 CARDIOVASCULAR DISEASE
10
11 (iii) NUMBER OF SEQUENCES: 44
12
13 (iv) CORRESPONDENCE ADDRESS:
14 (A) ADDRESSEE: PENNIE & EDMONDS LLP
15 (B) STREET: 1155 Avenue of the Americas
16 (C) CITY: New York
17 (D) STATE: NY
18 (E) COUNTRY: USA
19 (F) ZIP: 10036-2711
20
21 (v) COMPUTER READABLE FORM:
22 (A) MEDIUM TYPE: Diskette
23 (B) COMPUTER: IBM Compatible
24 (C) OPERATING SYSTEM: DOS
25 (D) SOFTWARE: FastSEQ Version 2.0
26
27 (vi) CURRENT APPLICATION DATA:
28 (A) APPLICATION NUMBER: 08/799,910
29 (B) FILING DATE: 13-FEB-1997
30 (C) CLASSIFICATION:
31
32 (vii) PRIOR APPLICATION DATA:
33 (A) APPLICATION NUMBER: 60/011,787
34 (B) FILING DATE: 16-FEB-1996
35
36
37
38 (viii) ATTORNEY/AGENT INFORMATION:
39 (A) NAME: Coruzzi, Laura A
40 (B) REGISTRATION NUMBER: 30,742
41 (C) REFERENCE/DOCKET NUMBER: 7853-067-999
42
43 (ix) TELECOMMUNICATION INFORMATION:
44 (A) TELEPHONE: (212)7909090
45 (B) TELEFAX: (212)8699741
46 (C) TELEX: 66141 PENNIE

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49

(2) INFORMATION FOR SEQ ID NO:1:

50

51

(i) SEQUENCE CHARACTERISTICS:

52

(A) LENGTH: 1953 base pairs

53

(B) TYPE: nucleic acid

54

(C) STRANDEDNESS: both

55

(D) TOPOLOGY: linear

56

57

(ii) MOLECULE TYPE: cDNA

58

(ix) FEATURE:

59

60

(A) NAME/KEY: Coding Sequence

61

(B) LOCATION: 162...1871

62

(D) OTHER INFORMATION:

63

64

65

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

66

67

GGCACGAGTC GGAGCCGGGC GGAGGGGAGG GGGGAAAGAG GAGCGCAGGG TGAGAGTGAG 60

68

CCGCAGGCTT CGGGAGGCGA GGGGGCGGGG GGAGCAGCGC CGAGGYCGCC GCCTCCGCCT 120

69

CCGCCGCTA GGACTAGGGG GTGGGGGACG GACAAGCCCC G ATG CCG GGG GAG ACG 176

70

Met Pro Gly Glu Thr

71

1 5

72

73

GAA GAG CCG AGA CCC CCG GAG CAG CAG GAC CAG GAA GGG GGA GAG GCG 224

74

Glu Glu Pro Arg Pro Pro Glu Gln Gln Asp Gln Glu Gly Gly Glu Ala

75

10 15 20

76

77

GCC AAG GCG GCT CCG GAG GAG CCC CAA CAA CGG CCC CCT GAG GCG GTC 272

78

Ala Lys Ala Ala Pro Glu Glu Pro Gln Gln Arg Pro Pro Glu Ala Val

79

25 30 35

80

81

GCG GCG GCG CCT GCA GGG ACC ACT AGC AGC CGC GTG CTG AGG GGA GGT 320

82

Ala Ala Ala Pro Ala Gly Thr Thr Ser Ser Arg Val Leu Arg Gly Gly

83

40 45 50

84

85

CGG GAC CGA GGC CGG GCC GCT GCG GCC GCC GCC GCC GCA GCT GTG TCC 368

86

Arg Asp Arg Gly Arg Ala Ala Ala Ala Ala Ala Ala Ala Val Ser

87

55 60 65

88

89

CGC CGG AGG AAG GCC GAG TAT CCC CGC CGG CGG AGG AGC AGC CCC AGC 416

90

Arg Arg Arg Lys Ala Glu Tyr Pro Arg Arg Arg Arg Ser Ser Pro Ser

91

70 75 80 85

92

93

GCC AGG CCT CCC GAC GTC CCC GGG CAG CAG CCC CAG GCC GCG AAG TCC 464

94

Ala Arg Pro Pro Asp Val Pro Gly Gln Gln Pro Gln Ala Ala Lys Ser

95

90 95 100

96

97

CCG TCT CCA GTT CAG GGC AAG AAG AGT CCG CGA CTC CTA TGC ATA GAA 512

98

Pro Ser Pro Val Gln Gly Lys Lys Ser Pro Arg Leu Leu Cys Ile Glu

99

105 110 115

INPUT SET: S21738.raw

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 100 | | | | | | | | | | | | | | | | | |
| 101 | AAA | GTA | ACA | ACT | GAT | AAA | GAT | CCC | AAG | GAA | GAA | AAA | GAG | GAA | GAA | GAC | 560 |
| 102 | Lys | Val | Thr | Thr | Asp | Lys | Asp | Pro | Lys | Glu | Glu | Lys | Glu | Glu | Glu | Asp | |
| 103 | | | 120 | | | | | 125 | | | | | 130 | | | | |
| 104 | | | | | | | | | | | | | | | | | |
| 105 | GAT | TCT | GCC | CTC | CCT | CAG | GAA | GTT | TCC | ATT | GCT | GCA | TCT | AGA | CCT | AGC | 608 |
| 106 | Asp | Ser | Ala | Leu | Pro | Gln | Glu | Val | Ser | Ile | Ala | Ala | Ser | Arg | Pro | Ser | |
| 107 | | 135 | | | | | 140 | | | | | 145 | | | | | |
| 108 | | | | | | | | | | | | | | | | | |
| 109 | CGG | GGC | TGG | CGT | AGT | AGT | AGG | ACA | TCT | GTT | TCT | CGC | CAT | CGT | GAT | ACA | 656 |
| 110 | Arg | Gly | Trp | Arg | Ser | Ser | Arg | Thr | Ser | Val | Ser | Arg | His | Arg | Asp | Thr | |
| 111 | 150 | | | | | 155 | | | | | 160 | | | | | 165 | |
| 112 | | | | | | | | | | | | | | | | | |
| 113 | GAG | AAC | ACC | CGA | AGC | TCT | CGG | TCC | AAG | ACC | GGT | TCA | TTG | CAG | CTC | ATT | 704 |
| 114 | Glu | Asn | Thr | Arg | Ser | Ser | Arg | Ser | Lys | Thr | Gly | Ser | Leu | Gln | Leu | Ile | |
| 115 | | | | | 170 | | | | | 175 | | | | | 180 | | |
| 116 | | | | | | | | | | | | | | | | | |
| 117 | TGC | AAG | TCA | GAA | CCA | AAT | ACA | GAC | CAA | CTT | GAT | TAT | GAT | GTT | GGA | GAA | 752 |
| 118 | Cys | Lys | Ser | Glu | Pro | Asn | Thr | Asp | Gln | Leu | Asp | Tyr | Asp | Val | Gly | Glu | |
| 119 | | | | 185 | | | | 190 | | | | | | 195 | | | |
| 120 | | | | | | | | | | | | | | | | | |
| 121 | GAG | CAT | CAG | TCT | CCA | GGT | GGC | ATT | AGT | GGT | GAA | GAG | GAA | GAG | GAG | GAG | 800 |
| 122 | Glu | His | Gln | Ser | Pro | Gly | Gly | Ile | Ser | Gly | Glu | Glu | Glu | Glu | Glu | Glu | |
| 123 | | | 200 | | | | | 205 | | | | | 210 | | | | |
| 124 | | | | | | | | | | | | | | | | | |
| 125 | GAA | GAA | GAG | ATG | TTA | ATC | AGT | GAA | GAG | GAG | ATA | CCA | TTC | AAA | GAT | GAT | 848 |
| 126 | Glu | Glu | Glu | Met | Leu | Ile | Ser | Glu | Glu | Glu | Ile | Pro | Phe | Lys | Asp | Asp | |
| 127 | | 215 | | | | | 220 | | | | | 225 | | | | | |
| 128 | | | | | | | | | | | | | | | | | |
| 129 | CCA | AGA | GAT | GAG | ACC | TAC | AAA | CCC | CAC | TTA | GAA | AGG | GAA | ACC | CCA | AAG | 896 |
| 130 | Pro | Arg | Asp | Glu | Thr | Tyr | Lys | Pro | His | Leu | Glu | Arg | Glu | Thr | Pro | Lys | |
| 131 | 230 | | | | | 235 | | | | | 240 | | | | | 245 | |
| 132 | | | | | | | | | | | | | | | | | |
| 133 | CCA | CGG | AGA | AAA | TCA | GGG | AAG | GTA | AAA | GAA | GAG | AAG | GAG | AAG | AAG | GAA | 944 |
| 134 | Pro | Arg | Arg | Lys | Ser | Gly | Lys | Val | Lys | Glu | Glu | Lys | Glu | Lys | Lys | Glu | |
| 135 | | | | | 250 | | | | | 255 | | | | | 260 | | |
| 136 | | | | | | | | | | | | | | | | | |
| 137 | ATT | AAA | GTG | GAA | GTA | GAG | GTG | GAG | GTG | AAA | GAA | GAG | GAG | AAT | GAA | ATT | 992 |
| 138 | Ile | Lys | Val | Glu | Val | Glu | Val | Glu | Val | Lys | Glu | Glu | Glu | Asn | Glu | Ile | |
| 139 | | | 265 | | | | | 270 | | | | | | 275 | | | |

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| | | |
|-----|---|------|
| 153 | CGC TAT TTG CAG CAC CAC ATT AAA TAC CAG CAT TTG CTG AAG AAG AAA | 1184 |
| 154 | Arg Tyr Leu Gln His His Ile Lys Tyr Gln His Leu Leu Lys Lys Lys | |
| 155 | 330 335 340 | |
| 156 | | |
| 157 | TAT GTA TGT CCC CAT CCC TCC TGT GGA CGA CTC TTC AGG CTT CAG AAG | 1232 |
| 158 | Tyr Val Cys Pro His Pro Ser Cys Gly Arg Leu Phe Arg Leu Gln Lys | |
| 159 | 345 350 355 | |
| 160 | | |
| 161 | CAA CTT CTG CGA CAT GCC AAA CAT CAT ACA GAT CAA AGG GAT TAT ATC | 1280 |
| 162 | Gln Leu Leu Arg His Ala Lys His His Thr Asp Gln Arg Asp Tyr Ile | |
| 163 | 360 365 370 | |
| 164 | | |
| 165 | TGT GAA TAT TGT GCT CGG GCC TTC AAG AGT TCC CAC AAT CTG GCA GTG | 1328 |
| 166 | Cys Glu Tyr Cys Ala Arg Ala Phe Lys Ser Ser His Asn Leu Ala Val | |
| 167 | 375 380 385 | |
| 168 | | |
| 169 | CAC CGG ATG ATT CAC ACT GGC GAG AAG CCA TTA CAA TGT GAG ATC TGT | 1376 |
| 170 | His Arg Met Ile His Thr Gly Glu Lys Pro Leu Gln Cys Glu Ile Cys | |
| 171 | 390 395 400 405 | |
| 172 | | |
| 173 | GGA TTT ACT TGT CGA CAA AAG GCA TCT CTT AAT TGG CAC ATG AAG AAA | 1424 |
| 174 | Gly Phe Thr Cys Arg Gln Lys Ala Ser Leu Asn Trp His Met Lys Lys | |
| 175 | 410 415 420 | |
| 176 | | |
| 177 | CAT GAT GCA GAC TCC TTC TAC CAG TTT TCT TGC AAT ATC TGT GGC AAA | 1472 |
| 178 | His Asp Ala Asp Ser Phe Tyr Gln Phe Ser Cys Asn Ile Cys Gly Lys | |
| 179 | 425 430 435 | |
| 180 | | |
| 181 | AAA TTT GAG AAG AAG GAC AGC GTA GTG GCA CAC AAG GCA AAA AGC CAC | 1520 |
| 182 | Lys Phe Glu Lys Lys Asp Ser Val Val Ala His Lys Ala Lys Ser His | |
| 183 | 440 445 450 | |
| 184 | | |
| 185 | CCT GAG GTG CTG ATT GCA GAA GCT CTG GCT GCC AAT GCA GGC GCC CTC | 1568 |
| 186 | Pro Glu Val Leu Ile Ala Glu Ala Leu Ala Ala Asn Ala Gly Ala Leu | |
| 187 | 455 460 465 | |
| 188 | | |
| 189 | ATC ACC AGC ACA GAT ATC TTG GGC ACT AAC CCA GAG TCC CTG ACG CAG | 1616 |
| 190 | Ile Thr Ser Thr Asp Ile Leu Gly Thr Asn Pro Glu Ser Leu Thr Gln | |
| 191 | 470 475 480 485 | |
| 192 | | |
| 193 | CCT TCA GAT GGT CAG GGT CTT CCT CTT CTT CCT GAG CCC TTG GGA AAC | 1664 |
| 194 | Pro Ser Asp Gly Gln Gly Leu Pro Leu Leu Pro Glu Pro Leu Gly Asn | |
| 195 | 490 495 500 | |
| 196 | | |
| 197 | TCA ACC TCT GGA GAG TGC CTA CTG TTA GAA GCT GAA GGG ATG TCA AAG | 1712 |
| 198 | Ser Thr Ser Gly Glu Cys Leu Leu Leu Glu Ala Glu Gly Met Ser Lys | |
| 199 | 505 510 515 | |
| 200 | | |
| 201 | TCA TAC TGC AGT GGG ACG GAA CGG GTG AGC CTG ATG GCT GAT GGG AAG | 1760 |
| 202 | Ser Tyr Cys Ser Gly Thr Glu Arg Val Ser Leu Met Ala Asp Gly Lys | |
| 203 | 520 525 530 | |
| 204 | | |
| 205 | ATC TTT GTG GGA AGC GGC AGC AGT GGA GGC ACT GAA GGG CTG GTT ATG | 1808 |

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206 Ile Phe Val Gly Ser Gly Ser Ser Gly Gly Thr Glu Gly Leu Val Met
207 535 540 545
208
209 AAC TCA GAT ATA CTC GGT GCT ACC ACA GAG GTT CTG ATT GAA GAT TCA 1856
210 Asn Ser Asp Ile Leu Gly Ala Thr Thr Glu Val Leu Ile Glu Asp Ser
211 550 555 560 565
212
213 GAC TCT GCC GGA CCT TAGTGGACAG GAAGACTTGG GGCATGGGAC AGCTCAGACT T 1912
214 Asp Ser Ala Gly Pro
215 570
216
217 TGTATTTAAA AGTTAAAAAG GACAAAAAAA AAAAAAAAAA A 1953
218
219
220

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: unknown
- (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: protein

(v) FRAGMENT TYPE: internal

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

231
232 Met Pro Gly Glu Thr Glu Glu Pro Arg Pro Pro Glu Gln Gln Asp Gln
233 1 5 10 15
234 Glu Gly Gly Glu Ala Ala Lys Ala Ala Pro Glu Glu Pro Gln Gln Arg
235 20 25 30
236 Pro Pro Glu Ala Val Ala Ala Ala Pro Ala Gly Thr Thr Ser Ser Arg
237 35 40 45
238 Val Leu Arg Gly Gly Arg Asp Arg Gly Arg Ala Ala Ala Ala Ala
239 50 55 60
240 Ala Ala Ala Val Ser Arg Arg Arg Lys Ala Glu Tyr Pro Arg Arg Arg
241 65 70 75 80
242 Arg Ser Ser Pro Ser Ala Arg Pro Pro Asp Val Pro Gly Gln Gln Pro
243 85 90 95
244 Gln Ala Ala Lys Ser Pro Ser Pro Val Gln Gly Lys Lys Ser Pro Arg
245 100 105 110
246 Leu Leu Cys Ile Glu Lys Val Thr Asp Lys Asp Pro Lys Glu Glu
247 115 120 125
248 Lys Glu Glu Glu Asp Asp Ser Ala Leu Pro Gln Glu Val Ser Ile Ala
249 130 135 140
250 Ala Ser Arg Pro Ser Arg Gly Trp Arg Ser Ser Arg Thr Ser Val Ser
251 145 150 155 160
252 Arg His Arg Asp Thr Glu Asn Thr Arg Ser Ser Arg Ser Lys Thr Gly
253 165 170 175
254 Ser Leu Gln Leu Ile Cys Lys Ser Glu Pro Asn Thr Asp Gln Leu Asp
255 180 185 190
256 Tyr Asp Val Gly Glu Glu His Gln Ser Pro Gly Gly Ile Ser Gly Glu
257 195 200 205
258 Glu Glu Glu Glu Glu Glu Glu Met Leu Ile Ser Glu Glu Glu Ile

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SEQUENCE VERIFICATION REPORT
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Line

Error

Original Text